



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,002	11/17/2003	Darin Evans	SHA01 P-346A	2260

277 7590 09/29/2004

PRICE HENEVELD COOPER DEWITT & LITTON, LLP
695 KENMOOR, S.E.
P O BOX 2567
GRAND RAPIDS, MI 49501

[REDACTED] EXAMINER

PEDDER, DENNIS H

ART UNIT	PAPER NUMBER
3612	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/715,002	EVANS, DARIN	
	Examiner	Art Unit	
	Dennis H. Pedder	3612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 02 September 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-31 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7-21, 27-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitation of “collapsible with a parallelogram motion” is indefinite. Claim 7 is incorrect as there is no parallelogram motion disclosed. The nose portions deflect upwardly and downwardly at their left edges respectively when an object of the matching size impacts the space inbetween and the right edge, fastened to the beam, does not move, precluding the recited motion. Applicant’s remarks are inconsistent with the disclosure and illogical.

Claim 9 lacks antecedent to “top and bottom front walls” for --upper-front and lower-front walls--.

Claim 14 lacks antecedent to the “mid-horizontal section” found in claim 1.

Claim 15 lacks antecedent to “nose sections” for --nose portions--.

Claim 15 is also not disclosed as there is no throwing force, merely a force resolution 31, 31’ as disclosed for figure 4. Further, inasmuch as the force 31’ is restricted from moving the person downward because of the ground beneath, and due to the majority of the weight of the person being above the knee, the impact would direct the person into the automobile, not upwardly. In greater detail for applicant’s apparently necessary edification, no structural distinction is disclosed for the upper and lower horizontal

Art Unit: 3612

sections. As a result, the force resolutions 31 and 31' are necessarily equal. Force 31 is therefore counteracted by force 31' and no throwing force is resultant. There is necessarily a pushing force component which would push the knee to the left in figure 4 and result in the above mentioned torso movement toward the automobile.

As to claim 16, no upward plural forces are apparently disclosed as the disclosure has force 31 only.

Claim 21 lacks a clear frame of reference for "longer than the front wall". How are the former and latter measured? It is deemed necessary to recite the length of the front wall as extending in length between the upper and lower walls.

As to claims 27-31, the term "thin" lacks frame of reference.

Drawings

The drawing objection of 4/28/2004 is withdrawn in view of applicant's remarks.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 20 in total and "thin", claims 27-31. Applicant's remarks in regard to this latter objection are noted, but a drawing does not cure a specification defect.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 5-8, 15-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Scrivo.

Scrivo has top and bottom sections 34 with top, upper mid-wall, upper front wall, bottom wall, lower-mid wall, and lower front wall with nose portions that extend forward of the middle section at 32 with a mid-front wall connecting the upper-mid wall and lower-mid wall as seen in figure 2 and a middle section at the space therebetween. The top and bottom sections extend forward of the mid-front wall and define a channel at the space therebetween. Impact with an object of the shape of a knee would inherently shift the nose portions upwardly and downwardly as claimed. Applicant might note that the structure of Scrivo at the point of impact is identical to that of the invention, hence the inherent movement as claimed. In addition, a second level of absorption is offered by the sections backing up the nose portions at 32 and in front of the beam, being crushed to provide increased energy absorption. Applicant should reexamine the claims and note that a low level impact absorption is inherent in the reduced section of the Scrivo reference at point of impact due to the reduced cross section of elements 34 relative to element 32. The greater cross section of the latter inherently results in increased energy absorption. Further, even for a hypothetical solid absorber, the overly broad claim limitations are met as energy absorption increases with increased impact stroke.

As to claims 5-6, see middle location of recess and ridge at 24 of Scrivo.

As to claims 7-8, a small cross section of an impacting object, such as a knee of a pedestrian, impacting between the sections 34 of Scrivo would shift the sections upwardly and downwardly in wedge like manner with vertical force components.

As to claim 16, the nose portions of Scrivo have upper and lower walls, a front wall and an angled front between front and lower wall. The front wall has curved upper and lower sections to form a non-planar front surface.

As to claim 19, see stabilizing wall at 32 in fig. 2 and in the walls of the channel for rivet 52 in figure 4.

As to claim 20, see fascia 42. The fascia would tend to cause the claimed motion for a knee that is of lesser vertical height than the space between the nose portions.

As to claim 21, Scrivo has a front wall of length between upper and lower walls that is less than the length of the upper and lower walls. In addition, for knees of lesser vertical height than the absorber, the function is inherent in a resilient absorber as disclosed by Scrivo.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo in view of Sturrus et al., US 5,092,512.

Paragraph 5 above is incorporated by reference. It would have been obvious to one of ordinary skill to provide in Scrivo a bumper beam with an aerodynamic sweep as taught by Sturrus et al. in order to reduce wind resistance and increase fuel economy.

As to claim 11, the beam is approximately this ratio, the exact ratio being an obvious expedient balancing weight against protection.

As to claim 12, process steps are not given patentable weight in a product claim, but Sturrus et al. incidentally discloses roll forming.

As to claim 13, see recesses and ridges in figure 2 of Scrivo.

As to claim 14, Scrivo has a ridge at top, bottom and mid sections.

8. Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Scrivo.

Process steps are not given patentable weight in a product claim.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo.

The size of the beam is an obvious expedient to one of ordinary skill in the art, hardly a patentable distinction.

10. Claims 2, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo or Scrivo in view of Sturrus et al. as applied to claims 1 and 9 above, and further in view of Hamaya.

It would have been obvious to one of ordinary skill to provide in the references above wavy top and bottom walls as taught by Hamaya in order to add additional protection for pedestrians upon impact to those locations. Applicant should note that the wavy top wall

of Hamaya added to the absorber of Scrivo adds additional energy absorbing structure, enhancing the function of the absorber.

11. Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo or Scrivo in view of Sturrus et al. in view of Glance.

Scrivo does not detail the material of the absorber. Glance teaches that a bumper absorber may be manufactured of foam material. Foam inherently contains hollow areas throughout. It would have been obvious to one of ordinary skill to provide in Scrivo alone or as modified by Sturrus et al. a foam absorber material as taught by Glance in order to use an absorber commercially available with known properties.

Allowable Subject Matter

12. Claims 27-31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments filed 9/2/2004 have been fully considered but they are not persuasive. Please see the detailed action above.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

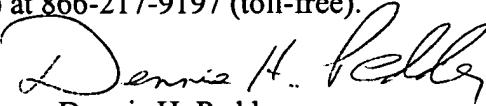
Art Unit: 3612

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis H. Pedder whose telephone number is (703) 308-2178. The examiner can normally be reached on 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn D. Dayoan can be reached on (703) 308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Dennis H. Pedder
Primary Examiner
Art Unit 3612

7/22/04

Application/Control Number: 10/715,002

Page 9

Art Unit: 3612

DHP

9/22/04